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SOME SUCCINEIDAE, WITH A NEW SPECIES By LESLIE HUBRICHT

During the spring of 1962, the author visited Lake Concordia, Louisiana, the type locality of *Succinea concordialis* Gould, and Alexandria, Louisiana, the type locality for *Succinea grosvenori* Lea and *Succinea haleana* Lea. Good series of all these species were collected and I found that these species were not what they had been generally considered to be. As a result, it will be necessary to change the status of several specific names. While unfortunately these changes must be made, I hope that a better understanding of the species will result, and that further changes in their status will not be necessary.

SUCCINEA CONCORDIALIS Gould.

Succinea concordialis Gould, 1848, Proc. Boston Soc. Nat. Hist. 3: 38.

Succinea unicolor Tryon, 1866, Amer. Jour. Conc. 2: 230, p. 2

(17) fig. 3.

This species was found in large numbers around Lake Concordia, and Lake St. John, and in Ferriday and Vidalia. Specimens from Lake Concordia are usually larger and more elongate than those from the vicinity of New Orleans, and are of a bright golden color with a reddish tip to the spire.

SUCCINEA GROSVENORI Lea.

Succinea grosvenori Lea, 1864, Proc. Acad. Nat. Sci. Phila.

p. 109.

Succinea haleana Lea, 1864, Proc. Acad. Nat. Sci. Phila. p. 109. Succinea forsheyi Lea, 1864, Proc. Acad. Nat. Sci. Phila. p. 109. ? Succinea mooresiana Lea, 1864, Proc. Acad. Nat. Sci. Phila. . 109.

Succinea (Desmosuccinea) pseudavara Webb, 1954, Gastropo-

dia 1: 18, figs. 4, 5.

Succinea grosvenori is an extremely variable species. In the vicinity of New Orleans, Louisiana, it is small and thin and

could be readily mistaken for Catinella vermeta (Say). Near the Red River at the foot of Monroe St., Alexandria, Louisiana, adults are like Binney's figure, and the young like Succinea haleana. Near the Red River at a sand pit, 3.5 miles southeast of Alexandria, the whorls are flattened above. Such shells were described as Succinea forsheyi by Lea. Shells with the whorls flattened above have been confused with Succinea witteri Shimek.

The name Succinea grosvenori has long been used as a catchcall for any Succinea too large to be called avara and too small to be called ovalis, so that most published records of its distribution are meaningless. It is known from Alabama, Mississippi, Louisiana, Texas, Oklahoma, Kansas, and Missouri.

SUCCINEA GREERI Tryon.

Succinea greeri Tryon, 1866, Amer. Jour. Conch. 2: 232, pl. 2 (17), fig. 8.

Succinea grosvenori Lea, Pilsbry, 1948, Land Moll N. Amer.

2: 819, figs. 442h, 444a, 444d. (in part).

During the mating season the distal end of the penis in Succinea greeri is inflated but does not form a loop. Later the penis contracts and is withdrawn into the sheath. At this later stage it might be confused with S. grosvenori but the penial retractor muscle is much heavier and the penis is unpigmented.

S. greeri is a sun loving species. It is to be found on bare ground in full sun. About Vicksburg it occurs on loess banks with a southern or western exposure. It is known from Alabama, Mississippi, and Louisiana.

SUCCINEA WITTERI Shimek

Succinea witteri Shimek, 1913, Nat. Hist. Bull. State Univ. 10wa 6: 31, pl. 1, figs. I-IV.

Succinea concordialis Gould, Pilsbry, 1948, Land Moll. N.

Amer. 2: 833, figs. 482-484. (in part).

Succinea witteri is usually found in sunny situations near water. It is apparently rather common west of the Mississippi River from Texas to Iowa. East of the Mississippi it is sporadic in its occurrence, but occurs as far east as Beaufort Co., North Carolina.

Succinea bakeri, new species. Plate 8, upper figs. Shell with a little over 3 whorls, thin but firm, elongate-ovate, sculpture of unevenly spaced growth lines and wrinkles. Spire acute, moderately long, sutures well marked, periphery well rounded. Aperture ovate, occupying about sixty percent of the

length of the shell; outer, basal, and columellar margins well rounded.

Height Diam. Ap. H. Ap. W. Whorls

13.3 mm. 6.7 mm. 8.0 mm. 5.3 mm. 3.3 Holotype. 15.3 mm. 7.4 mm. 8.9 mm. 5.1 mm. 3.3 Paratype. 13.1 mm. 7.0 mm. 8.2 mm. 5.5 mm. 3.3 Paratypes.

Type locality.—Illinois: St. Clair Co.: loess, Stolle, holotype 116915 and paratypes 116913 Chicago Natural History Museum, other paratypes A2150 collection of the author.

The only species in the loess of the upper Mississippi valley with which Succinea bakeri might be confused is Succinea ovalis pleistocenica Baker, from which it differs in its smaller size, more slender form, and less impressed sutures.

Succinea bakeri is the species usually called Succinea grosvenori in Pleistocene fauna lists of the upper Mississippi valley. It is not S. grosvenori, as now understood, nor can it be assigned to any other species which one might logically assume to have lived in the upper Mississippi valley during Pleistocene time. In order to prevent further confusion with other species in the literature it seems best to describe it as a new species. As a loess fossil it ranges as far south as Adams County, Mississippi. It is named in honor of the late Dr. Frank Collins Baker.

SUCCINEA URBANA Hubricht

Succinea urbana Hubricht, 1961, Nautilus 75: 32. Succinea floridana Pilsbry, Walker, 1928, Terr. Moll. Alabama,

p. 168. (in part).

Succinea urbana is a common snail on the Selma Chalk and other calcareous outcrops in southwestern Alabama and adjacent Mississippi. It also occurs as a fossil near Ocala, Florida, in company with Glyphyalinia floridana (Morrison). It estivates above ground on the stems of plants with a complete disregard for the sun, much like Bulimulus alternatus (Say) in southern Texas.

CATINELLA GELIDA (F. C. Baker)

Succinea grosvenori gelida F. C. Baker, 1927, Nautilus 40: 118. This species is certainly not related to Succinea grosvenori as now understood. Some shells resemble a slender Catinella vermeta (Say), and others resemble shells of Catinella wandae (Webb) from Grand Teton National Park, Teton Co., Wyoming, and it is possible that the name gelida has been applied to more than one species. In view of the impossibility of demonstrating the

relationship to either of the above species by anatomical studies, Catinella gelida is here retained as a separate species.

CATINELLA STRETCHIANA (Bland)

Succinea stretchiana Bland, 1865, Ann. Lyc. Nat. Hist. N. Y.,

8: 168, fig. 16.

Specimens of this species, collected by Ted C. Frantz of the Nevada Fish and Game Department, at the type locality, Little Valley Washoe Co., Nevada, were dissected. The penis was found to be very similar to that of *Catinella rehderi* (Pilsbry); but the appendix is longer, reaching to the end of the penis or a little beyond. The appendix is much more slender than in *Catinella vermeta* (Say).

NEW SPECIES OF HYDROBIIDAE

BY LESLIE HUBRICHT

Antroselates, new genus (masculine).

Shell: small, solid, globose-conic, narrowly perforate or rimate; spire short, body whorl large, somewhat inflated; sculpture of numerous spiral epidermal threads.

Operculum: paucispiral, hyaline.

Animal: translucent whitish, blind; verge placed in center of back, simple, long and slender, tapering to a point, oval in cross section.

Radula: central tooth without basal denticles or tongue-shaped projection, dorsal margin not reflected, uniformly arched with about fourteen small cusps of nearly uniform size. Lateral teeth with many small cusps of uniform size.

Type species: Antroselates spiralis.

The shell of Antroselates resembles that of Somatogyrus Gill in shape, but differs in the presence of numerous spiral epidermal threads. The animal differs in being blind and in having a very simple verge which is placed in the center of the back, not behind the right tentacle.

Antroselates spiralis, new species. Plate 8, figs. A, B. Shell: globose-conic, solid, color whitish, subhyaline; sculpture of growth lines and numerous spiral epidermal threads; whorls 4.5, rapidly increasing in diameter, sutures well impressed, spire broadly conical, a little shorter than the aperture; first whorl coiled in the same plain, forming a flat apex; body whorl very large, somewhat shouldered, periphery flattened; aperture roundly ovate, peristome continuous, appressed to the parietal wall, thickened within; umbilicus rimate.